UNITED STATES PATENT AND TRADEMARK OFFICE

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The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Amendment

1.   The amendment filed 11/27/2007 has been entered. Claims 58-76 have been

added. Claims 49 and 50 have been amended. No claims have been cancelled.

Accordingly, claims 37-76 are pending in the present office action.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
conditions and requirements of this title.

Claims 65-76 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. All of the claims 65-76 are system claims

comprising only means for limitations with no accompanying hardware, without any

accompanying hardware the claims are software per se and thus not a valid "system"

within the meaning of U.S.C. 101. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application
by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this
title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 37-57 are rejected under 35 U.S.C. 102(e) as being anticipated by US

20030212666 (hereinafter Basu).

As for claim 37 Basu discloses: receiving a search query comprising a plurality of

search terms from a user (See figure 3 #302 and paragraph 0032), wherein the search

query includes at least one user-selected operator associated with a first one of the

search terms of the search query (See paragraph 0043); broadening the first one of the

search terms based on the at least one user-selected operator to produce a broadened

search query; and executing a search using the broadened search query (See

paragraph 0041).

As for claim 38 the rejection of claim 37 is incorporated and further Basu

discloses: wherein the search query further includes a user-selected delimiter

associated with a second one of the search terms that indicates that the second one of

the search terms should not be broadened (See paragraph 0038).

As for claim 39 Basu discloses: receiving a search query comprising a plurality of search terms; broadening one of the plurality of search terms; excluding the broadened one of the plurality of search terms from the search query; executing a search based on the search query to provide search results; and evaluating the search results relative to the excluded search term using categorical or clustered distinctions (See paragraphs 0043 and 0004).

As for claim 40 the rejection of claim 37 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: determining a meaning associated with the first one of the search terms (See paragraph 0004 and 0011).

As for claim 41 the rejection of claim 40 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: determining a related concept based on the meaning (See paragraph 0004 and 0011).

As for claim 42 the rejection of claim 37 is incorporated, and further Basu discloses: wherein broadening the first one of the search terms comprises: modifying, replacing, supplementing, removing or restating the first one of the search terms (See paragraph 0034).

As for claim 43 the rejection of claim 37 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: selecting a broadening search term associated with the first one of the search terms from a set of words having a synonymous, alternate spelling, common root, or similar semantic meaning (See paragraph 0041).

As for claim 44 the rejection of claim 37 is incorporated and further Basu discloses presenting at least one broadened search term associated with the first one of the search terms as at least one of a static list, a menu of selectable search terms, a set of checkboxes or a list of selectable search terms; and receiving a selection from the presented at least broadened search term from the user (See paragraph 0038).

As for claim 45 the rejection of claim 37 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: presenting at least one broadened search characteristic associated with the first one of the search terms as a hyperlink; and forming the broadened search query responsive to a selection of the hyperlink by the user (See paragraph 0038).

As for claim 46 the rejection of claim 37 is incorporated and further Basu discloses: wherein the at least one user-selected operator comprises a plurality of operators, wherein the plurality of operators comprise a same operator repeated multiple times (See paragraph .0033)

As for claim 47 the rejection of claim 46 is incorporated and further Basu discloses: wherein broadening the first one of the search terms based on the at least one user-selected operator to produce a broadened search query comprises: broadening the first one of the search terms to an extent determined by a number of times the same operator is repeated in the at least one user-selected operator (See paragraph 0033 and 0038).

As for claim 48 Basu discloses: receiving a first search query comprising a plurality of terms (See figure 3 #302 and paragraph 0032); excluding a first term of the plurality of terms from the first search query to produce a second search query (See paragraph 0034); executing a first search based on the second search query to retrieve first search results; mapping the first search results into related terms that are associated with the first term; and executing a second search based on a third search query that includes the plurality of terms and the related terms to retrieve second search results (See paragraphs 0034-0038) .

As for claim 49 Basu discloses: receiving a search query comprising a plurality of search terms from a user, wherein the search query includes at least one first symbol which defines a user-assigned strength of broadening associated with a first one of the search terms of the search query (See paragraph 0038); broadening the first one of the search terms to an extent determined by the user-assigned strength to produce a

broadened search query; and executing a search based on the broadened search query
(See paragraph 0038).

As for claim 50 the rejection of claim 49 is incorporated, and further Basu
discloses: wherein the user-assigned strength includes multiple operators and wherein
a number of the multiple operators determine the extent to which the first one of the
search terms is broadened (See paragraph 0038 and .0041)

As for claim 51 the rejection of claim 49 is incorporated and further Basu
discloses: wherein the search query further includes a user-selected delimiter
associated with a second one of the search terms that indicates that the second one of
the search terms should not be broadened (See paragraph 0038).

As for claim 52 the rejection of claim 49 is incorporated and further Basu
discloses: wherein broadening the first one of the search terms comprises: determining
a meaning associated with the first one of the search terms (See paragraph 0004 and
0011).

As for claim 53 the rejection of claim 52 is incorporated and further Basu
discloses: wherein broadening the first one of the search terms comprises: determining
a related concept based on the meaning (See paragraph 0004 and 0011).

As for claim 54 the rejection of claim 49 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: modifying, replacing, supplementing, removing or restating the first one of the search terms (See paragraph 0034).

As for claim 55 the rejection of claim 49 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: selecting a broadening search term associated with the first one of the search terms from a set of words having a synonymous, alternate spelling, common root, or similar semantic meaning (See paragraph 0041).

As for claim 56 the rejection of claim 49 is incorporated and further Basu discloses: presenting at least one broadened search term associated with the first one of the search terms as at least one of a static list, a menu of selectable search terms, a set of checkboxes or a list of selectable search terms; and receiving a selection from the presented at least broadened search term from the user (See paragraph 0038)..

As for claim 57 the rejection of claim 49 is incorporated and further Basu discloses: wherein broadening the first one of the search terms comprises: presenting at least one broadened search characteristic associated with the first one of the search terms as a hyperlink; and forming the broadened search query responsive to a selection of the hyperlink by the user (See paragraph 0038).

As for claim 58 the rejection of claim 37 is incorporated and further Basu

discloses: where the at least one user-selected operator comprises a first symbol that

represents search term broadening (See paragraph 0043).

As for claim 59 the rejection of claim 58 is incorporated and further Basu

discloses: where the first symbol comprises one of a graphical or character symbol (See

paragraph 0043).

Claims 65-76 are system claims corresponding to the method of claims

1,59,38,64,40-45,61,62 respectively and are thus rejected for the same reasons as set

forth in the rejection of claims 1,59,38,64,40-45,61,62.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 60-64, 68, 75, 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu in view of US 6243713 (hereinafter Nelson).

As for claim 60 the rejection of claim 58 is incorporated and further Nelson discloses: where the search query further includes a user-selected delimiter associated with a second one of the search terms that indicates that the second one of the search terms should not be broadened and where the user-selected delimiter comprises a second symbol that is different than the first symbol (See figure 11a).It would have been obvious to an artisan of ordinary skill in the pertinent at the time the invention was made to have incorporated the teaching of Nelson into the system of Basu. The modification would have been obvious because the two references are concerned with the solution to problem query broadening and data retrieval , therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan, would have been motivated to combine the cited references since Nelsons teaching would enable users of the Basu system to explicitly have operators different from other operator along with the ability to index results and database data.

As for claim 61 the rejection of claim 58 is incorporated and further Nelson

discloses: where the at least one user-selected operator comprises a plurality of

operators and where the plurality of operators comprise the first symbol repeated

multiple times (See column 7 lines 15-25). It would have been obvious to an artisan of

ordinary skill in the pertinent at the time the invention was made to have incorporated

the teaching of Nelson into the system of Basu.The modification would have been

obvious because the two references are concerned with the solution to problem query

broadening and data retrieval , therefore there is an implicit motivation to combine these

references. In other words, the ordinary skilled artisan, during his/her quest for a

solution to the cited problem, would look to the cited references at the time the invention

was made. Consequently, the ordinary skilled artisan, would have been motivated to

combine the cited references since Nelsons teaching would enable users of the Basu

system to explicitly have operators different from other operator along with the ability to

index results and database data.

As for claim 62 the rejection of claim 61 is incorporated and further Nelson

discloses: where broadening the first one of the search terms based on the at least one

user-selected operator to produce a broadened search query comprises: broadening

the first one of the search terms to an extent determined by a number of times the first

symbol is repeated (See column 7 lines 15-25). It would have been obvious to an

artisan of ordinary skill in the pertinent at the time the invention was made to have

incorporated the teaching of Nelson into the system of Basu. The modification would have been obvious because the two references are concerned with the solution to problem query broadening and data retrieval , therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan, would have been motivated to combine the cited references since Nelsons teaching would enable users of the Basu system to explicitly have operators different from other operator along with the ability to index results and database data..

As for claim 63 the rejection of claim 49 is incorporated and further Nelson discloses: where the first symbol comprises one of a graphical or character symbol (See figure 11b). It would have been obvious to an artisan of ordinary skill in the pertinent at the time the invention was made to have incorporated the teaching of Nelson into the system of Basu. The modification would have been obvious because the two references are concerned with the solution to problem query broadening and data retrieval , therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan, would have been motivated to combine the cited references since Nelsons teaching would enable users of the Basu system to explicitly have

operators different from other operator along with the ability to index results and database data..

As for claim 64 the rejection of claim 51 is incorporated and further Nelson discloses: where the user-selected delimiter comprises a second symbol that is different than the first symbol (See column 7 lines 25-35). It would have been obvious to an artisan of ordinary skill in the pertinent at the time the invention was made to have incorporated the teaching of Nelson into the system of Basu. The modification would have been obvious because the two references are concerned with the solution to problem query broadening and data retrieval , therefore there is an implicit motivation to combine these references. In other words, the ordinary skilled artisan, during his/her quest for a solution to the cited problem, would look to the cited references at the time the invention was made. Consequently, the ordinary skilled artisan, would have been motivated to combine the cited references since Nelsons teaching would enable users of the Basu system to explicitly have operators different from other operator along with the ability to index results and database data..

Claims 68,75,76 are system claims corresponding to the method of claims 64,61,62 respectively and are thus rejected for the same reasons as set forth in the rejection of claims 64,61,62.

Response to Arguments

Applicant's arguments filed 11/29 have been fully considered but they are not persuasive.

Applicant argues:

BASU, however, does not disclose, suggest or even mention that the textual query received from the user includes a user-selected operator associated with one of the search terms of the query. BASU, furthermore, does not disclose, suggest or even mention broadening the one of the search terms based on the at least one user-selected operator. BASU, therefore, does not disclose or suggest the receipt of a search query comprising multiple search terms from a user, where the search query includes at least one user-selected operator associated with one of the search terms of the search query, or broadening the one of the search terms based on the at least one user-selected operator to produce a broadened search query, as recited in claim 37.

Examiner responds:

Examiner is not persuaded. Reference is made to MPEP 2144.01 - Implicit Disclosure "[I]n considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." In re Preda, 401 F.2d 825, 826,159 USPQ 342, 344 (CCPA 1968). In this case paragraph 0043 of Basu discloses that the expansion operator may be defined by the user, therefore since the

user may define the operator the user certainly must be able to selected their defined operator.

Applicant argues:

For example, claim 38 recites that the search query further includes a user-selected delimiter associated with a second one of the search terms that indicates that the second one of the search terms should not be broadened. BASU does not disclose or suggest this feature. The Office Action (pg. 3) relies on paragraph 0038 of BASU for allegedly disclosing the above-noted feature of claim 38. Applicants respectfully disagree with the Examiner's interpretation of BASU.

Examiner responds:

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims-Broadest Reasonable Interpretation During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). In this case the delimiter only must be associated with a second of the search terms and that association must result in the search term no being broadened.

Applicant argues:

Paragraph 0038 merely discloses the use of parametric learning techniques for assigning probabilities of relevance to sub-query terms that have been expanded from a given textual query. This section of BASU, therefore, does not disclose excluding a first term of a plurality of terms from a first search query to produce a second search query; executing a first search based on the second search query to retrieve first search results; mapping the first search results into related terms that are associated with the first term; and executing a second search based on a third search query that includes the plurality of terms and the related terms to retrieve second search results, as recited in claim 48.

Examiner responds:

Examiner is not persuaded. Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. Interpretation of Claims-Broadest Reasonable Interpretation During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969). In this case the purpose of assigning relevance is exclusion of the terms currently being used that are not providing the expected result (See paragraph 0038).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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LJH
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March 3, 2008

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